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REMARKS

Claims 1 - 6, and 8 - 28 remain pending in this application. Claims 14, 15, 22 and 24 - 28 have been withdrawn. Claims 1 and 16 have been amended to more clearly describe the limitations of the claimed invention. No new matter has been added. In view of the above amendments and the following remarks, it is respectfully submitted that claims 1 - 6, 8 - 13, 16 - 21 and 23 of the presently pending claims are allowable.

Claims 1 and 16, and consequently all dependant claims, stand rejected under 35 U.S.C. § 112 as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 16 have been amended to particularly point out and distinctly claim the subject matter. Specifically, claim 1 has been amended to recite "side walls extending away from the partition on the same side as the first opening to create a channel between the first opening and the contoured flow deflection element." Claim 16 has been similarly amended. Since the side walls extend away from the partition to create a channel, inherently, they cannot cover the first opening/inlet itself. Therefore, it is respectfully requested that the § 112 rejection of claims 1 and 16, as well as all dependent claims, be withdrawn.

Claims 1 - 6, 8 - 12, 16 - 21, and 23 stand rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 6,461,321 to Quinn.

Amended claim 1 recites a distal tip for a catheter comprising "first and second lumens extending therethrough, wherein in an operative configuration, the first and second lumens are coupled to first and second lumens of a dual lumen catheter" and "a partition separating the first lumen from the second lumen" in combination with "a first opening fluidly connected to the first lumen for inflow of fluid from a body lumen into which the distal tip is inserted in a normal mode of operation and for outflow of fluid thereinto in a reverse mode of operation" and "a second opening fluidly connected to the second lumen, the second opening being disposed distally from the first opening and separated therefrom by a selected stagger distance for outflow of fluid therefrom when the catheter is in the normal mode of operation and for inflow of fluid from the body lumen in a reverse mode of operation" along with "a contoured flow deflection element directing, in the reverse mode of operation, outflow from the first opening away from the second opening" and "a contoured outlet portion of the second opening reducing an outflow

velocity therefrom in the normal mode of operation” and *“side walls extending away from the partition on the same side as the first opening to create a channel between the first opening and the contoured flow deflection element.”*

In contrast, Quinn describes a bolus tip 20 coupled to a dual lumen catheter which, as shown in Fig. 8 includes a completely flat septum 58 having no side walls of any kind and clearly includes no side walls extending from the septum 8 to create any sort of channel between the port 37 and a contoured flow detection element. It is respectfully submitted that the Examiner’s assertion that reference characters 37 and 98 of Quinn show side walls as claimed is in error as reference character 37 identifies as an arterial port while reference character 98 indicates an arch. The reference arrows in Fig. 5 associated with reference characters 37 and 20 indicate that no side walls “extend between the first opening and the contoured flow deflection element.” The arrow associated with reference character 37 points to the bottom of the U-shaped trough, indicating that this is where the port 37 ends. The arrow associated with reference character 20 (the bolus) points to the region of the connect tip immediately distal of the port 37. Thus, the port 37 transitions to the bolus 20 immediately, without any intermediary side walls extending therebetween.

Therefore, it is respectfully submitted that claim 1 is not anticipated by Quinn and is thus allowable. Because claims 2 - 6 and 8 - 12 depend from and include all of the limitation of claim 1, it is respectfully submitted that these claims are also allowable.

Similarly, claim 16 recites a flow control tip for a multi-lumen catheter comprising “an attachment portion adapted to fluidly connect to a distal portion of a catheter” in combination with “a contoured bolus defining at least a portion of an inlet and an outlet of the distal tip, the inlet and outlet being separated by a partition, so that, when coupled to the catheter, the inlet is coupled to a first one of the catheters lumens and the outlet is coupled to a second one of the catheters lumens, and a flow deflector directing fluids exiting the inlet in a first mode away from the outlet and *side walls extending away from the partition on the same side as the inlet to create a channel between the inlet and the bolus*, wherein the contoured bolus defines a specified stagger distance between the inlet and the outlet.”

For the same reasons discussed above in regard to claim 1, it is respectfully submitted that claim 16 is not anticipated by Quinn. Specifically, Quinn does not show or suggest *“side walls extending away from the partition on the same side as the inlet to create a channel between*

the inlet and the bolus,” as recited in claim 16. Therefore, it is respectfully submitted that claim 16 is allowable. Because claims 17 - 21 and 23 depend from and include all of the limitations of claim 16, it is respectfully submitted that these claims are also allowable.

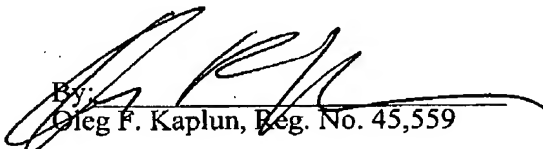
Claim 13 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Quinn in view of U.S. Patent No. 5,171,216 to Dasse et al. (“Dasse”). The Examiner states that Quinn discloses the device substantially as claimed, but does not disclose that the stagger distance between the openings is between 1 and 1.5cm. The Examiner cites Dasse to cure this deficiency. However, it is respectfully submitted that Dasse does not cure the above-described deficiencies of Quinn.

As shown in Fig. 2B of Dasse, infusion and withdrawal ports 14 and 16 are simply formed in and flush with a side surface of a multi-lumen tube 2. Thus, there are no side extensions or other structures to create a channel for preventing outflow from either of the ports 14, 16 from spilling radially around the tube 2. Thus, it is respectfully submitted that Dasse neither discloses nor suggests *“side walls extending away from the partition on the same side as the first opening to create a channel between the first opening and the contoured flow deflection element,”* as recited in claim 1. Therefore, because claim 13 depends from includes all of the limitations of claim 1, it is respectfully submitted that this claim is also allowable.

In light of the foregoing, Applicants respectfully submit that all of the pending claims are in condition for allowance. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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